

ABSTRACT

There is provided a small and high-performance System in Package (SiP) suitable for high-density mounting. A System in Package (SiP) has a stack structure such that two memory chips are stacked and mounted over the main surface of a wiring substrate, a microcomputer chip is stacked and mounted over the upper part thereof, and the chips are sealed by a mold resin. Each of the memory chips is constructed so as to transmit and receive data to/from the outside of the system via the microcomputer chip. The microcomputer chip is constructed of a multiport structure having various interfaces between it and the outside of the system in addition to an interface between it and the inside of the system. The number of terminals (pins) of the microcomputer chip is much larger than that of the memory chips.